

**REMARKS**

Reconsideration and allowance of the above-referenced application are respectfully requested.

**I. STATUS OF THE CLAIMS**

Claims 1 and 6 are amended herein.

New claims 8 and 9 are added.

In view of the above, it is respectfully submitted that claims 1-9 are currently pending and under consideration in the present application.

**II. REJECTION OF CLAIMS 1-7 UNDER 35 U.S.C. §103(A) AS BEING UNPATENTABLE OVER MESAKI ET AL (USP 6,217,231) IN VIEW OF ENOCHS ET AL (USP 4,818,056)**

The present invention as recited, for example, in claim 1 as amended herein, relates to an optical module comprising "a photodetector mounted to the slope end surface and optically coupled directly with the optical fiber" and "said slope end surface being inclined with respect to an optical axis in said ferrule."

In Figs. 23C and 23D, Mesaki discloses a ferrule having a slope end surface which is used, for example, to minimize the reflection of light reflected back at the photodiode 46 and injected again into the optical fiber in the reverse direction (see column 14, lines 35-46). The end surface of the photodiode 46 is set perpendicular to the optical axis in the ferrule 40A, and an optical signal reflected back by the photodiode 46 is again reflected at the sloped end surface of the ferrule 40A in a stray direction. Thus, it appears that it is an objective of Mesaki to have a photoreception surface of the photodiode 46 form an angle with respect to the end surface of the ferrule 40A and minimize the effect of reflection (see column 14, lines 43-46).

In contrast, the claimed photodiode of the present application contacts the end surface of the ferrule and thus, the slope end surface of the ferrule is provided not only to prevent reflection of an optical signal but also to facilitate a wire bonding process. See page 7, lines 32-33 and page 8, lines 18-19 of the Applicant's specification.

Enochs discloses mounting a photodetector on an end surface of a ferrule. However, the end surface of Enoch is perpendicular to the optical axis in the ferrule. Therefore, Enoch does not teach or suggest a photodetector mounted to a slope end surface of a ferrule, wherein the slope end surface is inclined with respect to an optical axis in the ferrule like claimed optical

module of the present application.

Further, page 8, line 15 of the Applicant's specification refers to the use of a greater inclination angle as compared with the conventional inclination angle of eight degrees (see page 8, line 9 of the Applicant's specification). Thus, it is noted here that there would be no motivation for one of ordinary skill in the art to provide an inclination angle in the ferrule end surface of Enochs to derive the feature of the present application in which the wire bonding process is facilitated. Thus, it would not have been obvious to one of ordinary skill in the art to combine the teachings of Mesaki and Enochs to disclose the features recited in claim 1 of the present application.

Similar to claim 1, independent claim 6 recites "said slope end surface being inclined with respect to an optical axis in said ferrule," which distinguishes over the cited prior art.

Claims 2-5 and claim 7 depend from independent claims 1 and 6. Therefore, for at least the reasons that claims 1 and 6 distinguish over the cited prior art, it is respectfully submitted that claims 2-5 and 7 also distinguish over the cited prior art.

In view of the above, it is respectfully submitted that the rejection is overcome.

### **III. NEW CLAIMS**

Claim 8 recites "said slope end surface being inclined with respect to an optical axis in the ferrule," which distinguishes over the cited prior art.

Claim 9 recites that "an end surface of the photodetector is inclined with respect to an optical axis in the ferrule," which distinguishes over the cited prior art.

In view of the above, it is respectfully submitted that new claims 8 and 9 patentably distinguish over the cited prior art.

### **IV. CONCLUSION**

In view of the foregoing amendments and remarks, it is respectfully submitted that each of the claims patentably distinguishes over the prior art, and therefore defines allowable subject matter. A prompt and favorable reconsideration of the rejection along with an indication of allowability of all pending claims are therefore respectfully requested.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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